

THREE NEW TAXA FOR THE FLORA OF COSTA RICA

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ABSTRACT

New species of *Eugenia* (Myrtaceae), *Paullinia* (Sapindaceae), and *Parathesis* (Myrsinaceae) from Costa Rica are described.

KEY WORDS: Costa Rica, Myrtaceae, *Eugenia*, *Paullinia*, Sapindaceae, *Parathesis*, Myrsinaceae, systematics

In preparation of the treatments of Myrtaceae, Myrsinaceae, and Sapindaceae for the *Manual de Las Plantas de Costa Rica*, the following new species were found.

MYRTACEAE

EUGENIA TERESAЕ J.F. Morales, *spec. nov.* TYPE: COSTA RICA. San José: Zona Protectora La Cangreja, Santa Rosa de Puriscal, bosque primario en las márgenes del Río Negro, falda S.E. de la Fila La Cangreja, 400 m, 9° 42' 50" N, 84° 23' 30" W, 8 May 1993 (fl,fr), Morales 1430 (HOLOTYPE: INB; Isotypes: B,CAS,COL,CR,F,K,MEXU,MO,NY,US,VEN).

Species insignis foliis fructusaque amplissimis, a speciebus nobis notis bene distincta.

Shrub 3-4 m tall; branchlets sparsely puberulent. Leaves opposite; petioles canaliculate above, puberulent, 0.8-2.0 cm long, rugose; blade 13.5-28.5 × 5.0-17.5 cm, elliptic to lanceolate, glabrate; acuminate at apex, acute to cuneate at the base; venation impressed above, prominent, puberulent and conspicuous below, secondary veins 10-14, brochidodromous. Inflorescence cauliflorous, fasciculate, puberulent, 1-11-flowered; pedicels 3-8 mm long; bracteoles deltate, 1.0-1.5 mm long, scarious, persistent; calyx lobes 4, membranaceous, elliptic, obtuse to rounded, in 2 series,

external ones 2.4×5.7 mm, internal ones 5.7×9.1 mm; petals ovate, white, $1.5-1.6 \times 1.0-1.4$ cm, reflexed, deciduous after anthesis; stamens ca. 480; filaments 6-11 mm long; anthers basifix, ca. 1 mm long; style 1.7-1.9 cm long. Fruits globose to subglobose, $1.8-2.5 \times 1.9-2.4$ cm, yellow to cream, granular, glabrous; pericarp ca. 2 mm thick; seed 1.6-2.1 cm diam., smooth.

Restricted to the wet tropical forests of the southern Pacific lowlands of Costa Rica, between Carara Biological Reserve and the Osa Peninsula, 100-400 m.

Eugenia teresae differs from all the Mesoamerican species by its large leaves and flowers. It is somewhat related to *Eugenia sarapiquensis* Sanchez, but differs from that species in its longer leaves and bigger flowers and fruits.

Additional specimens examined: COSTA RICA. Puntarenas: Cantón de Osa, Rincón, cabeceras Quebrada Salto, 100 m, 24 Jun 1990 (fr), *Herrera* 4256 (CR,INB,MO); Golfito, Parque Nacional Corcovado, trail to Cedral, near El Cedral, 150 m, 20 Mar 1995 (fl), *Morales & Moraga* 3666 (INB). San José: Zona Protectora La Cangreja, Santa Rosa de Puriscal, 300-400 m, 29 Jul 1992 (fr), *Morales* 277 (CR,INB,MO), 10 Aug. 1992 (fr), *Morales* 338 (INB,CR), 3 Mar 1994 (fl), *Morales, et al.* 2408 (B,CR,INB,K,MO,NY,USJ).

MYRSINACEAE

PARATHESIS ACOSTENSIS J.F. Morales, *spec. nov.* TYPE: COSTA RICA. San José: Cantón de Acosta, Fila Bustamante, cabeceras de Quebrada Colorado, 1040 m, $9^{\circ} 43' N$, $84^{\circ} 16' W$, 29 May 1994 (fl), *Morales, et al.* 2856 (HOLOTYPE: INB).

Arvorum parva, ramuli ferrugineo-tomentelli. Folia petiolata, petiole 4-6 cm longo; lamina elliptica, $14-40 \times 6-15$ cm. Inflorescentia terminalis, paniculata, ferrugineo-tomentella; pedicelli 5-7 mm longi; petala 4-5 mm longa.

Trees or small trees, (2-)5-22 m; branchlets thick, densely ferruginous-tomentose. Leaves: petiole 4-6 cm, ferruginous-tomentose; leaf blades $14-40 \times 6-15$ cm, broadly elliptic; abruptly short-acuminate at the apex, obtuse basally; minutely serrate; glabrate above; minutely ferruginous-puberulent beneath, mostly along the veins; the primary lateral veins 25-33 pairs. Inflorescences terminal, openly pyramidal, tripinnately paniculate, conspicuously ferruginous-tomentose. Flowers corymbose, pale pinkish; pedicels 5-7 mm; sepals 1.5-2.0 mm, ovate, acute, ferruginous-tomentose; petals narrowly lanceolate, 4-5 mm long, villous within; filaments 1.5-2.0 mm long, the anthers erect at anthesis, slender, ca. 1.5 mm long, not punctate. Fruit black-purple, globose, 6-7 mm in diameter (dry).

This species is known from the southern Pacific lowlands of Costa Rica, between Acosta and the Osa Peninsula, at 0-700(-1000) m.

Parathesis acostensis is closely related to *P. amplifolia* Lundell from Panamá, but differs by its anthers erect at anthesis, not punctate. Most of the material were previously identified as *P. aeruginosa* Standley.

Additional specimens examined: COSTA RICA. Puntarenas: Parque Nacional Corcovado, Estación San Pedrillo, 21 Sep 1993 (fr), Aguilar 2364 (INB, MO); Cantón de Golfito, Península de Osa, Estación Los Patos, 5 June 1994 (fr), Aguilar 3335 (CR, INB, MO); Reserva Forestal Golfo Dulce, Río Rincón valley, 28 Apr 1988 (fl), Hammel & Robles 16768 (INB, MO); Reserva Forestal Golfo Dulce, Playa Campanario o San Josecito, 4 Aug 1993 (fr), Harmon 332 (INB); Parque Nacional Corcovado, Arco de Piedra to Río Corcovado, June 1989 (fl), Kernan 1155 (CR, INB, MO); Cantón de Osa, Rancho Quemado, 25 Aug 1992 (fr), Marín & Marín 500 (CR, INB, MO); Aguabuena, W of Rincón, 17 Apr 1993, Thomsen 876 (C, INB, K, USJ).

SAPINDACEAE

***PAULLINIA TALAMANCENSIS* J.F. Morales, spec. nov.** TYPE: COSTA RICA. Puntarenas: Foothills of the Cordillera de Talamanca, between Sitio Cotón (Cotonsito) and Mellizas, 1300-1450 m, 8° 54' N, 82° 46' W, 11 Mar 1984 (fl, fr), Davidse, et al. 25563 (HOLOTYPE: INB; Isotype: MO).

Fruticosa volubilis; corpus lignosum simplex; rami teres, glabris. Folia 3-foliolato-pinnata; foliola elliptica, 4.5-15.0 cm longa, 3-5 cm lata. Thyrsi axillares, solitarii, 4.5-15.0 cm longi. Fructus manifeste stipitatus, globosus.

Lianas; stems slightly sulcate when young, suberete when fully mature, glabrous to glabrate; wood simple. Leaves pinnately 3-foliate; petiole without wings, somewhat sulcate above; leaflets 4.5-15.0 × 3-5 cm, elliptic; acute to abruptly short-acuminate at the apex, cuneate to obtuse basally; subentire to very obscurely crenate above the middle; glabrous; stipules not seen. Inflorescences axillary, solitary, 4.5-13.5(-15.0) cm long, glabrous; bracteoles ovate, ca. 1 mm long, scarious; pedicels 2-4 mm, glabrous, articulated about midway. Flowers white, in small helicoid thyrses; sepals ca. 2 mm, rounded, glabrous; mature flowers unknown. Capsules 0.8-1.1 cm long, conspicuously stipitate, globose, 3-locular, nonwinged, red, very sparsely puberulent to glabrate, short-acuminate at the apex; seeds unknown.

Paullinia talamancensis is restricted to the foothills of the Cordillera de Talamanca, near San Vito de Coto Brus, at 1200-1850 m, but probably will be found in Panamá.

This species is closely related to *Paullinia austin-smithii*, from northern and northwestern of Costa Rica, but differs by its not winged, conspicuously stipitate fruits.

Additional specimens examined: COSTA RICA. Puntarenas: Foothills of the Cordillera de Talamanca, around Tres Colinas, 20 Mar 1984 (fr), Davidse, et al.

25687 (INB,MO); Coto Brus, Finca Cafrosa, 12 Mar 1996 (fr), Navarro 268 (CR,INB,MO).

ACKNOWLEDGMENTS

The author is greatly indebted to the Directors and Curators of CR, F, GH, MO, NY, and USJ for the loan of material. This publication has been assisted financially by National Science Foundation Grant DEB-9300814 - *Manual of the Plants of Costa Rica* (B. Hammel & M. Grayum, co-principal investigators). I thank Michael Grayum (MO) and Nelson Zamora (INB) for review of the manuscript. Jorge Gómez-Laurito helped in the Latin diagnoses.